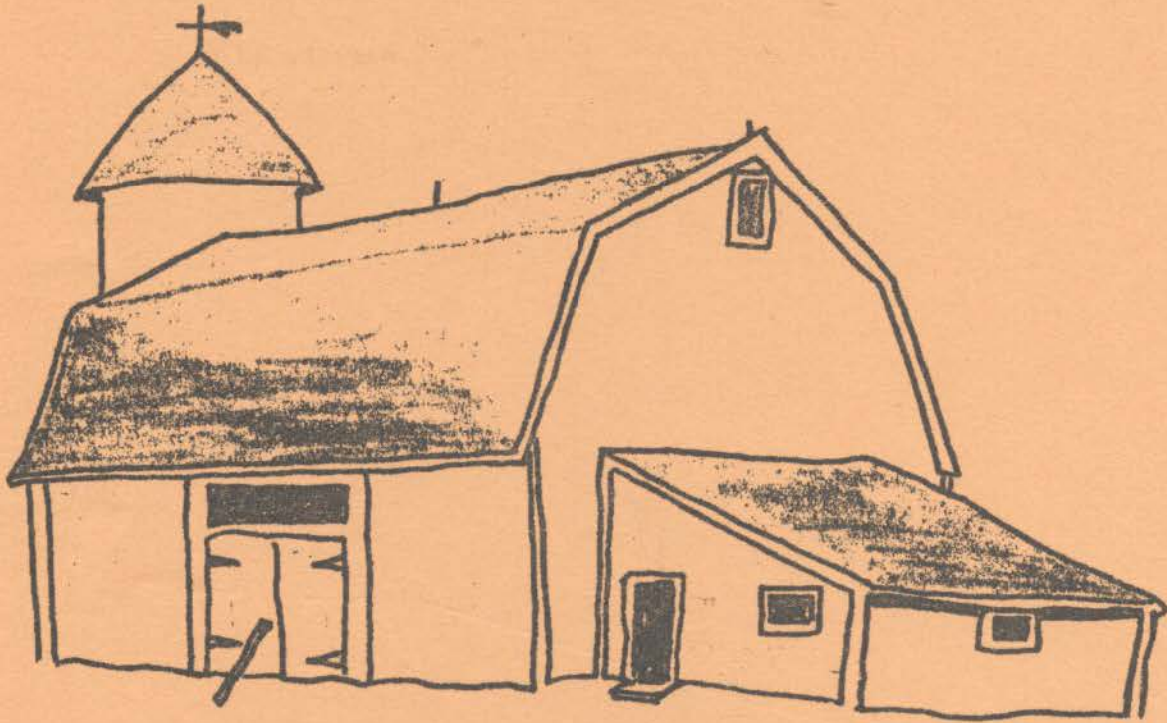


# **farms farmers & farmlands**



**the role of agriculture  
in the c.n.v.r.**

**central naugatuck valley  
regional planning agency**

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TITLE: FARMS, FARMERS AND FARMLAND: THE ROLE OF AGRICULTURE  
IN THE CENTRAL NAUGATUCK VALLEY REGION

AUTHOR: CENTRAL NAUGATUCK VALLEY REGIONAL PLANNING AGENCY

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ABSTRACT: This document contains a detailed analysis of agricultural  
trends in the Region and indicates some of the causes of  
the decline of farming and farmland in the Region. The  
report evaluates the adequacy of various strategies aimed  
at preserving agriculture and agricultural production and  
provides a series of objectives and policies geared toward  
the preservation of agricultural land and maintenance of  
agricultural production.

Principal responsibility for preparation of this report was with  
Charles Vidich, Regional Planner.

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## Introduction

During the last fifteen years, continual population growth in the Region, state, nation and the world have dramatically increased the demand for food. Since 1940, the world's population has nearly doubled from about 2 billion to nearly 4 billion in the mid-seventies. During this same period of time, world agricultural production also increased with rapid developments in hybrid crops and animals, richer feeds, richer fertilizers, more mechanized harvesting techniques and improved irrigation practices. However, despite the revolutionary developments in the field of agriculture, world food production has not always been able to keep pace with world food consumption. The problem has not been felt in America or the European nations, but in the developing nations, where high birth rates are the norm, poverty and hunger have become major political issues with global implications on the peace, economy and welfare of all other peoples of the world.

While the U. S. produces far more food than other nation's of the world - exporting large quantities to other nations every year - it consumes far more on a per capita basis than any other nation of the world. Rising income levels have contributed to our greater level of food consumption and largely accounts for the fact that American meat consumption has increased nearly 110% and average annual per capita food consumption nearly 6 percent in the space of less than thirty years.

Paralleling the rise in the nation's population and food consumption levels has been a decline in the number of farms, farmers and farmland in many areas of Connecticut, the nation and the world. Increasing pressure to build more housing in rural areas and the steady rise in income levels has contributed to an unprecedented level of development in the largely farm areas surrounding the large metropolitan areas of the nation.

Connecticut Conservation Association, "The Vanishing Land," August-September, 1970, Vol. V, No. 2, P. 3.

State Department of Agriculture, Dairy Division, January, 1970.

U.S. Bureau of the Census, Census of Agriculture, 1969, Vol. 1 Area Reports, Part 6, Connecticut, U.S. Government Printing Office, Washington, DC, 1970, Data, P. 13.



As a result of the suburbanization of the urban work force, Connecticut rural farmland has rapidly increased in price as housing, urbanizing needs and speculative purchases have outbid crop production for the use of the land.

In response to the rising market value of farmland, some of Connecticut's prime agricultural land has recently been converted into housing developments or sites for expanding industry. Between 1964 and 1969, the U.S. Census of Agriculture reported that Connecticut lost 179,943 acres of farmland or nearly 25 percent of its total farm acreage. This rapid decline in farmland reflected a sharp decline in the number of working farms in the state. Between 1959 and 1972,<sup>1</sup> the state lost 3,766 farms or nearly 46% of all its farms.

The rapid decline in farming in the state has also occurred in the Central Naugatuck Valley Region. According to the State Department of Agriculture, two out of every three dairy farms that were in operation in the CNV Region during 1962 were no longer working farms in 1975<sup>2</sup> (see Table XI and Figure II). Poultry farms have experienced a similar decline in the Waterbury area. While no historical data is available for poultry farms in the total Region, the U.S. Census of Agriculture reported that two out of every three poultry farms operating in New Haven County (covering 9 of the 13 municipalities of the CNVR)<sup>3</sup> during 1964 were no longer in operation in 1969.

This disappearance of agriculture is largely due to the increased costs of farming but has been reinforced by rapid rural industrialization in the "farm towns" of the Region and rapid growth of housing developments on the prime agricultural lands. The growth of housing and industry has tended to occur on the Region's prime agricultural land due to ease of converting farmland into sites for development. Agricultural land is generally the most suitable for development because of its low slopes and well-drained soils - two features which are

<sup>1</sup>Connecticut Conservation Association, "The Vanishing Land," August-September, 1974, Vol. 7, No. 2, P. 3.

<sup>2</sup>State Department of Agriculture, Dairy Division, January, 1976.

<sup>3</sup>U.S. Bureau of the Census, Census of Agriculture, 1969, Vol. 1 Area Reports, Part 6, Connecticut, U.S. Government Printing Office, Washington, DC, County Data, P. 43.



necessary for septic system leaching fields. Two indications of the growing demand for agricultural land are the number and locations of new manufacturing firms in the Region and the growth of the Region's suburban and rural population. Between January, 1966, and June, 1975, the twelve suburban municipalities surrounding Waterbury attracted 234 new manufacturing firms, the bulk of which have located in some of the most agricultural areas of the Region (i.e., Cheshire and Watertown). Similarly, between 1960 and 1970, when Waterbury experienced less than a 1 percent increase in population, the suburban and rural farm towns had a 30.3% increase in their population. This rapid suburban population growth has shifted the region's population from Waterbury to the suburbs. In 1950, the suburban towns accounted for 36.3% of the region's population but by 1975 52.9% of the Region's population lived in the suburban towns.

#### Farming and Suburban Development

While increasing suburban and rural development has pushed much farmland into other non-agricultural uses, not all agriculture in the Region is incompatible with planned rural development. As an example, poultry, pig and nursery farms generally require relatively little land area to operate efficiently. One of the largest pig farms in the state is located in the City of Waterbury on 30 acres of land and many of the Region's largest nurseries and poultry farms are located on small parcels of land in the urbanized areas of Naugatuck, Cheshire and Watertown.

Generally, the large poultry farms have tended to be more space-efficient as new equipment has allowed farmers to keep more hens in a smaller area. Similarly, garbage feeding pigs, like those in Waterbury, require little space for grazing since all of their food is supplied from garbage collected locally. In addition, nurseries are generally compatible with suburban and rural development since most of these "farmers" utilize no more than two or three acres for the care and raising of plants.



However, the most important agricultural activity in the Region (in terms of sales), dairy farming, is a rather large user of land accounting for approximately two-thirds of all cropland and pasture (if state estimates are applicable to the Central Naugatuck Valley Region), though dairy farmers can exist on less than prime agricultural tillable land.

### Inventory of Farmland

Agricultural land has steadily dwindled in amount as the cost of farming has increased, coaxing farmers to sell out as other land uses have outbid agriculture for the use of the Region's prime farming areas. In 1970, the State Land Use Update Study classified 26,314 acres of land in the Region as active agricultural land. This represented approximately 13% of the total land mass of the Region (see Table XII). However, in 1975, a CNVRPA survey of lands classified as farmland under Public Act 490\* found nearly 5,000 acres less farmland than was revealed in the 1970 Land Use Update Study. Though the methodologies of these two land use surveys are not strictly comparable, they indicate that large amounts of the Region's farmland have been either sold or taken out of active agricultural use in the last five years.

Despite this decline, the Region currently has 21,620 acres, or nearly 11 percent, of all its land exempted as farmland under Public Act 490. In the municipalities of Bethlehem, Watertown and Southbury, as much as 19 percent or more of all the town's land was exempted under Public Act 490 as farmland in 1975 (see Table I).

\*Under Public Act 490, the Connecticut General Statutes defines farmland as any tract or tracts of land including woodland and wasteland constituting a farm unit. The preamble to the Act states, "(a) that it is the public interest to encourage the preservation of farmland, forest land and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state, (b) that it is in the public interest to prevent the forced conversion of farm land, forest land and open space land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farmland, forest land and open space land, and (c) that the necessity in the public interest of the enactment of the provisions of this act is a matter of legislative determination."



Though farming is still an important land use in the Region, the Region has less of its land in farming than the state or the nation as a whole. In 1970, 541,362 acres or 16 percent of the state's land and 1,064,000,000 acres or 47% of the nation's land was devoted to farming. In contrast, only 21,620 acres or 11% of the land in the Region was in active agricultural use.

As can be seen in Figure III, the percentage of the State's land and New Haven County's land in farms has steadily declined since 1945. If current trends continue, New Haven County could be without farmland in the early eighties and the state could be without farmland near 1990. However, a more probable trend is that the rate of decline in farmland will decrease in coming years with the result that the region and the state should be able to maintain approximately 7% and 12% of their land mass in agricultural use.

The most important farm activity (in terms of gross annual sales) in the Region is dairy farming, which directly or indirectly accounts for the bulk of the agricultural land in the Region. Poultry farming, orchards, vegetable farms, livestock farms, and fields used for hay account for less than one-third of the total cropland and pasture land in the state and the Region.

#### Types of Agriculture

While dairy farming is the largest single user of agricultural land in the Region, Christmas tree growers are the largest group of "farmers" with 78 Christmas tree farms in operation in 1975. Next in sheer number are the dairy farmers with 52 farms in 1975, followed by nurseries, retail vegetable farms, poultry farms, pig farms and fruit orchards. As can be seen in Table II, most of the dairy farming in the Region is concentrated in Bethlehem, Oxford, Watertown and Woodbury, accounting for 79% of all the working dairy farms. The bulk of the apple farming is confined to Cheshire and Bethlemin and 60% of all the vegetable farms are located in the municipality of Cheshire alone. Cheshire also has significant numbers of poultry farms, nurseries and Christmas tree growers. One-third of all the nurseries, 22% of all the Christmas tree growers and 25% of all the poultry farms in the Region are located in the municipality of Cheshire.



## Value of Agriculture Produced in the Region

In 1974, farmers in the Central Naugatuck Valley Region produced an estimated \$8,854,954.00 in sales from major agricultural products. The most valuable farm products were milk, nursery products and eggs, accounting for approximately 90 percent of the total farm sales (see Table III).

Though the number of farms in the state and the Region has been declining, cash receipts from farm marketings have continued to increase. On a statewide level, cash receipts from farming increased from \$149,868,000.00 in 1960 to \$167,611,000.00 in 1970 and \$203,608,000.00 in 1973.<sup>4</sup> State Department of Agriculture data on farming in the CNVR indicates that, while 1974 milk production was 24 percent less than it was in 1962, the cash receipts received from milk were 18 percent greater in 1974 than in 1962 (see Table X). This was largely due to the 57 percent increase in the price Connecticut farmers received for their milk.<sup>5</sup> In 1974, estimated dairy farm sales of milk in the Region were \$3,661,886.00 compared to \$3,084,053.00 in 1962 (see Table X).

On an individual basis, farmers in the CNVR earned less than the average Connecticut farmer from the sale of their agricultural products. Based on the U. S. Census of Agriculture for 1969, the average Connecticut farm had sales of \$32,492.00, whereas those operating in nine of the municipalities of the CNVR\* falling within New Haven County had sales of \$25,161.00.<sup>6</sup> Part of the discrepancy in income

<sup>4</sup>Farrish, Raymond, Economic Considerations of Extending Unemployment Insurance to Agriculture in Connecticut, Department of Agricultural Economics, College of Agriculture and Natural Resources, University of Connecticut, Sept. 1973, P. 17.

<sup>5</sup>United States Department of Agriculture, Agricultural Marketing Service, Federal Milk Order Market Statistics, Annual Summary 1974 and Annual Summary 1962.

<sup>6</sup>U. S. Bureau of the Census, Census of Agriculture, 1969, Vol. 1 Area Reports, Part 6, Connecticut, County Data, PP. 1 and 41.

\* Since Census of Agriculture data is limited to the county level, estimates of farm sales in the CNVR were based on New Haven County data since nine of the thirteen municipalities in the CNVR fall within New Haven County.



between farms in the State and New Haven County is due to the smaller size of farms in the New Haven County area. In 1969, the average farm in New Haven County had 92.4 acres of land whereas the average farm in the State had 120.5 acres.<sup>7</sup>

However, other factors influenced the lower sales of New Haven County farms. The fact that there is no tobacco farming in New Haven County (according to the 1969 Census of Agriculture tobacco farms are the most profitable farms per acre in the Nation) tends to deflate the value of the average farm income in the New Haven County area.

Though New Haven County farms engaging in crop production or the sale of live-stock or poultry earned substantially less than those in the state as a whole, this was not true for New Haven County farms engaging in vegetable or orchard production. As can be seen in Table IV, vegetable farms in New Haven County were slightly more profitable than the average state vegetable farm earning \$8,957 in farm sales in 1969 compared to \$8,040 in the state as a whole. Similarly, the relative abundance of large orchards in New Haven County (especially in Cheshire) resulted in average orchard sales of \$24,010 in New Haven County compared to only \$16,384 in the state (see Table IV.)

#### Regional Food Consumption

Today, the average American eats more and consumes a larger variety of foods than his ancestors did 70 or 100 years ago. Through improvements in truck refrigeration, reduced costs of freight transportation, the use of preservatives, additives and the advent of frozen and canned foods, residents of the state and the Region are able to eat a wide variety of foods foreign to the Connecticut climate. If they choose, they may eat citrus fruits or bananas in a winter snow storm, fresh vegetables in the spring or use sugar in their imported iced tea on a summer afternoon. The increased quantity of foodstuffs foreign to Connecticut, consumed within the Region, reflects the fact that agriculture is no longer a local enterprise with local markets, but a national and world

<sup>7</sup>Ibid.

system of production with wide distances between consumers and producers.

Partly due to increased tropical foodstuff available in the temperate climate and the emergence of refrigeration and canning, the average American was consuming 17 percent more food in 1973 than he was in 1910.<sup>8</sup>

According to the U.S. Department of Agriculture, the average American consumed 1,438 pounds of food during 1973 or approximately 3.9 pounds a day. On an annual basis, the average American's diet consisted of 353 pounds of dairy products, 294 eggs, 50 pounds of poultry, 155 pounds of meat, 130 pounds of fruit, 207 pounds of vegetables, 102 pounds of potatoes, 140 pounds of flour and cereal, 57 pounds of fat and oils, 125 pounds of sugar and 14 pounds of coffee, tea and cocoa.<sup>9</sup>

This level of consumption is appreciably greater than that found in most nations of the world; and, according to some food experts, indicates that Americans are over-eating. According to a New York Times report on World Food Crisis,

"The Average American consumes about five times as much of the earth's primary food as does the average Indian."<sup>10</sup>

Part of the reason that Americans consume more than other people of the world is because of the salience of meat in the American diet. Approximately 10 pounds of grain are required to produce one pound of meat on beef cattle.<sup>11</sup> This inefficient utilization of the earth's primary food resources is one reason for the larger consumption of food in America. However, another equally important cause of wasted food resources is overeating. According to an October 25, 1974, New York Times article titled, "Curb on U. S. Waste Urged to Help World's Hungry,"

<sup>8</sup>United States Department of Agriculture, Economic Research Service, Food Consumption and Expenditures, 1973, Washington, DC.

<sup>9</sup>Ibid., P.15.

<sup>10</sup>The New York Times, "Curb on U.S. Waste Urged to Help World's Hungry," October 25, 1974, P.20.

<sup>11</sup>Ibid.



Regional Food Production

"Because most Americans eat the way they do, consuming two to four times as much meat as the body can use and excreting the excess protein, agriculture experts say that a sizable share of this country's land, fertilizer and farming skills has been committed to growing food for animals and not directly for man."<sup>12</sup>

According to many nutritionists, one solution to this problem would be reduction of meat consumption and the adoption of a vegetarian diet which substitutes protein from grains, beans and other plant sources for animal protein. To date, the vegetarian diet is largely foreign to American and Western European peoples; but, with the recent sharp increases in the price of meat, many families have voluntarily cut down on their meat consumption as an economy measure. Increased use of the primary foods (rather than those further down the food chain) is one means of relieving the world food crisis. By eating less and preparing a diet largely based on proteins derived from vegetable sources, residents of the state and the Region can contribute to an overall world goal of producing more food for more people. The Governor's Task Force for the Preservation of Agricultural Land has supported the need to reduce meat consumption, emphasizing

"Because a pound of feed does not make a pound of meat - or even milk or eggs - we clearly could feed more people if we ate less meat."<sup>13</sup>

Partly because raising beef cattle requires extensive areas of land and because few Connecticut farmers are presently engaged in raising beef cattle, the Task Force has not recommended to maintain this form of food production within the state.

<sup>12</sup> Ibid., P. 1.

<sup>13</sup> Report of the Governor's Task Force for the Preservation of Agricultural Land, Final Report, December 20, 1974, P. 3.

## Regional Food Production

Despite the small size of the State of Connecticut, farmers produce substantial amounts of the State's total food needs. State farmers supply all of our eggs<sup>14</sup> and apples, a third of our vegetables in season, 40% of our milk, but less than 1% of the broiler meat and poultry meat.<sup>15</sup> In the CNVR, the greatest food production comes from dairy and poultry farms and apple orchards. The Region produces nearly 60% of all milk, 47% of all eggs and 42% of all apples consumed in the CNVR (see Table V). Very little broiler meat, poultry meat or vegetables are produced in this Region and all of our citrus fruits, fish, sugar and flour and cereal products are imported from other parts of the nation or the world.

The lack of self sufficiency of the Region or the State in meeting regional and state food needs should not be taken as a slight to Connecticut farmers. Connecticut farmers are some of the most efficient agricultural producers in the nation. As can be seen in Table VI, milk production per cow and the number of eggs produced per hen in the state is competitive or superior to such farming states as Iowa and Ohio. Indeed, Connecticut dairy farmers have actually doubled their production of milk per cow and increased the number of eggs per hen by nearly 30 percent in the space of thirty short years. This has allowed fewer Connecticut farmers to produce more milk and more eggs in 1970 than in 1940 (see Table VII).

As can be seen in Table VIII, it is clear that dairy farmers in the Region are almost as productive in the amount of daily milk produced per cow as are dairy farms in the state. The rapid increase in milk production per cow in the Region and the state is largely due to (1) a shift to higher producing breeds of cattle (particularly Holsteins), (2) improved breeding programs and

<sup>14</sup> Though eggs produced in Connecticut are sold elsewhere, the state provides sufficient eggs to feed its own population.

<sup>15</sup> Connecticut Conservation Association, "The Vanishing Land", August-September, 1974, Vol. 7, No.2, P.2. and personal correspondence of James Rock Regional Poultry Agent, Cooperative Extension Service, June 4, 1976



(3) better knowledge and use of improved feeding practices.<sup>16</sup> In addition, the increased milk production per dairy farm in Connecticut and the Region has largely been due to the development of various milking parlors and bulk tank handling systems which have resulted in a major increase in the efficiency of milking the herds and a consequent increase in herd sizes. Previously, milking was a time-consuming process, which tended to limit the size of the herd any one farmer could handle. Now, however, the number of cows per farm is less constrained by labor considerations. As can be seen in Table IX, the number of milking cows per farm in the Region and the State has increased dramatically in the last forty years. The average herd kept for milking in 1935 was 10, whereas, by 1975, there were 54 milking cows in the average herd in the Region and in the State. This pattern of expansion has held true for other types of agricultural activities as well. Poultry farms have increased in flock size in the last ten years in both New Haven County and the State. In 1964, the average State poultry farm had 2,577 hens and pullets of laying age; but, by 1969, the average number of hens and pullets per farm had increased to 5,178. This trend was also found in New Haven County but at a much lower level. Part of the reason for the nominal increase in the size of poultry farms in New Haven County and the Central Naugatuck Valley Region has been due to the accessibility of most poultry farms in this Region to nearby markets. These nearby markets have made it easier for the Region's poultry farmers to make a living without a large flock size. As a result, these farmers do not feel investment in more expensive automated space saving equipment (which has become popular with the large poultry farmers in Eastern Connecticut) will increase their income to warrant the cost.

Hens and Pullets of Laying Age in New Haven County  
and the State: 1964-1969

	Number Per Farm in 1964	Number Per Farm in 1969
New Haven County	2,474	2,577
State	2,577	5,178

<sup>16</sup>Farrish, Raymond, Economic Considerations of Extending Unemployment Insurance to Agriculture in Connecticut, Department of Agriculture Economics, College of Agriculture and Natural Resources, University of Connecticut, September, 1973, P.17.



## Growth of Farm Size

Overall, New Haven County has had a much more rapid increase in the acreage of the average farm than the state or the nation as a whole. Between 1964 and 1969, the average Connecticut farm increased about 1.3% from 118.9 acres to 120.5 acres, the average farm in the United States increased 11% from 332 to 369 acres, whereas the average farm in New Haven County increased 28% from 72.3 to 92.4 acres during the same period.

Though farms have been increasing in size, overall the state and New Haven County have experienced a net decline in the number of working farms. Between 1964 and 1969, New Haven County lost 37.8% of its farms while the state lost 26% of its farms. The result has been that, though the average farm has increased in acreage, the total number of farm acres in New Haven County and the state has dropped. New Haven County lost 20% of its farmland and the state lost 25% of its farmland during the period 1964 to 1969.

## Farm Work

Despite the rapid decline in the number of active farms in the Region in the last twenty years, the number of farm workers has increased. Between 1960 and 1970, there was a 30.7% increase in the number of individuals employed in agriculture (or 111 more farmers and farm laborers) in the Waterbury SMSA. All of this increase in employment occurred among farm laborers rather than farmers and farm managers. As can be seen in the Table on page 13, farm laborers increased 43.2% during the decade of the sixties while farmers and farm managers had a decrease of 11.0%. This upward trend in agricultural employment stands out in sharp contrast to the dramatic statewide decline in farm employment during the decade of the sixties. In 1960, there were 13,536 individuals engaged in farm work in the state; but, by 1970, this figure had dropped to 8,251, a decrease of 39% in ten years.



# Employment in Farm Work in the Waterbury SMSA: 1950-1970

	1950	1960	1970
Farmers and Farm Managers	436	252	223
Farm Laborers and Farm Foremen	334	176	252
TOTAL	770	428	475

## Employment in Farm Work in the State: 1950-1970

	1950	1960	1970
Farmers and Farm Managers	11,249	6,036	3,867
Farm Laborers and Farm Foremen	9,984	7,500	4,384
TOTAL	21,233	13,536	8,251

Source: U. S. Bureau of the Census, Census of Population: 1960 General Social and Economic Characteristics, Connecticut, Final Report PC(1)-8C and 1970: General Social and Economic Characteristics, Final Report PC(1)-C8.

Part of the explanation for the regional increase in farm employment may be due to the rapid growth of nurseries during the decade of the sixties and to a decrease in the number of family operated farms. With the decline of family farming, many farms have been forced to hire help which they formerly were able to get at no cost from children and other relatives. In addition, the consolidation and growth of many of the Region's orchard farms (which have traditionally used large numbers of farm laborers) may have increased the need for farm workers in the Waterbury SMSA during the decade of the sixties. This appears to be borne out by 1960 and 1970 Census data on farm workers in the Waterbury SMSA. All of the 111 new farm workers residing in the Waterbury SMSA were living in the urbanized areas of Waterbury, Watertown and Naugatuck indicating that most new farm workers were seasonal workers who possibly turned to agriculture as a solution to urban unemployment.

Though farm workers produce a large percentage of our state and regional food needs, they account for a small fraction of all workers. In 1970, only one-half of one percent of all employed persons 16 years old and over in the Waterbury SMSA were

employed as farmers or farm laborers. However, in the nation as a whole, farm workers accounted for slightly over 3% of the labor force. As can be seen in the Table below, farm laborers and farm foremen represent a larger segment of the farm working class in the Waterbury SMSA than in the nation as a whole. This is largely due to a greater presence of labor intensive farming in the Waterbury SMSA (such as apple picking and vegetable farming) than in the nation as a whole.

Farm Workers 16 years Old and Over in the  
Waterbury SMSA, the State and the Nation: 1970

	Waterbury SMSA		State		Nation	
	Number	Percent	Number	Percent	Number	Percent
Farmers and Farm Managers	223	0.26	3867	0.30	1,418,746	1.85
Farm Laborers and Farm Foremen	252	0.29	4384	0.34	948,309	1.23
TOTAL	475	0.55	8251	0.64	2,367,055	3.08

Source: U.S. Bureau of the Census, Census of Population, 1970 General Social and Economic Characteristics, Final Report PC (1) -C8 Connecticut; and Population Summary of the United States, U.S. Government Printing Office, Washington, DC.

The number of farmers will probably continue to decline in the years ahead as the costs of starting a career in farming continues to rise. The Connecticut Conservation Association stated,

"It is estimated that a young person today needs about \$125,000 (some put the figure as high as \$250,000) as an initial investment to get a firm start in farming."<sup>17</sup>

<sup>17</sup> Connecticut Conservation Association, "Vanishing Land", P.5.



These escalating costs have affected the number of new farmers able to start a career in farming in both the Region and the state. The fact that few young people are seeking careers in farming is reflected in the fact that the average age for farmers in Connecticut was 58 in 1974.<sup>18</sup>

However, despite this trend the enrollment in the University of Connecticut College of Agriculture and Natural Resources was higher in 1975 than in any time in the history of this institution.<sup>18a</sup>

One method of promoting the careers of graduates of the College of Agriculture would be to provide low interest state backed loans to qualified individuals wishing to start their own farms. The provision of low interest loans to purchase equipment supplies and herds may be one of the only ways left for Connecticut's young farmers to enter this dying occupation.

#### Public Act 490

In 1963, the Connecticut Legislature passed Public Act 490 providing tax relief for farmers. According to Robert Schoeplein, former professor of Economics at the University of Connecticut, "the act provides

that landholders who are farmers may apply annually to their local assessors to be classified as a farm unit so that the farmland, as approved, may be assessed 'based upon its current use without regard to neighboring land use of a more intensive nature....' "<sup>19</sup>

<sup>18</sup>Ibid.

<sup>18a</sup>Cowan, W.A., Head of Department of Animal Industries  
Enrollment in Agriculture and Natural Resources and Animal Industries  
at the University of Connecticut with Trends and Comparisons, October  
21, 1975 P.1

<sup>19</sup>Schoeplein, Robert, "The Initial Decade of P.A. 490: Connecticut's Open Space Act" in Connecticut Government, Winter, 1972, P.7.



Assessment of the land based on its use has been left up to local assessors with few guidelines provided by the state. A survey conducted by the CNVRPA in February, 1976, found that there was considerable variation in the formula used to determine the reduction of property valuations for participants under Public Act 490 in the municipalities of the CNVR. Tillable land was valued anywhere from \$150 per acre in Bethlehem to \$300 per acre in Cheshire while values for pasture ranged from \$50 an acre to \$300 an acre.

Four of the municipalities in the Region had a base rate value for all land designated as a farm unit, six municipalities applied different values to farmland depending upon whether the land was determined to be tillable, pasture, woodland, swamp or orchard, and two municipalities left the final decision up to the judgement of the assessor (see Table XIII).

On a regional basis, farmers in the CNVR had estimated valuation reduction of \$7,507,166 from farm exemptions in fiscal year 1975 or approximately \$347 per acre. In effect, the average parcel of farmland had a valuation reduction of 78 percent from its preclassification assessment. However, as can be seen in Table XIV, there was considerable variation in the average valuation reductions between municipalities. One municipality, Bethlehem, provided valuation reductions of less than 12% during fiscal year 1975, while five municipalities provided reductions averaging over 80% of the preclassification assessment of the land. Though Bethlehem is perhaps the most agricultural community in the Region, the average valuation reductions received by farmers have been considerably less than farmers in other municipalities of the Region because their town's land values have historically been more closely related to agricultural rather than industrial, commercial or residential uses. According to the Bethlehem assessor, since land values were so low even before the passage of P.A. 490, valuation reductions for farmland have not been as dramatic as in other municipalities which have been able to subsidize farming through the taxes accrued from higher industrial, commercial and residential land values. Though farm exemptions have had the effect of reducing the tax base of each municipality, nine of the twelve assessors surveyed by the CNVRPA in February, 1976



indicated that reduced taxes for farmland have not caused an increased tax burden for other town residents. According to the Middlebury Assessing Clerk,

"Public Act 490 helped keep farmland as such. Under hardship, farmers could conceivably sell off land to be subdivided bringing in more people which would require more town services, more schools, etc.

That would increase the burden on other town residents."

In effect, P.A. 490 has not only served to protect land used for farming but has been used as a device to limit unwanted population growth. Despite the relatively large valuation reduction provided in nearly all of the municipalities of the CNVR, it was only recently that many land owners and farmers have come to participate in the tax benefits of P.A. 490. According to the Southbury Assessor "prior to 1970 none of the town's farmers applied for tax relief under P. A. 490 because land assessment before the town's 1970 general revaluation were so low that it was not necessary to apply for classification under P.A. 490."<sup>20</sup> Nearly all of the municipalities responding to the 1976 CNVRPA survey indicated that despite an overall loss of farmland in recent years the number of farm acres exempted under P.A. 490 was greater than a decade ago when the act was first passed. The fact that ten of the Region's thirteen municipalities have undergone general revaluations since 1969, increasing local taxes has tended to encourage a greater level of farm participation under P.A. 490 in the last six years.

Though reduced taxes for farmers were intended to preserve farmland and "maintain a readily available source of food and farm products close to the metropolitan areas of the state",<sup>21</sup> by itself P.A. 490 does not prevent land

<sup>20</sup> Interview with Mr. Gates, Assessor in Southbury, February, 1976.

<sup>21</sup> Section 12-107a of the General Statutes of Connecticut, revised to 1975 as amended.

developers from taking advantage of these tax benefits for private gain. However the 1972 Conveyance tax amendment has mitigated some of the weaknesses of P.A. 490. It stipulates that all farmland sold within ten years of the date any land has been classified as farm under Section 12-107c of the General Statutes will be subject to a conveyance tax applicable to the total sales price of the land. The conveyance tax imposes its highest tax on land sales in the first year after classification with progressively smaller taxes imposed each succeeding year. The effect of the tax has been to limit fast land speculation among real estate developers attempting to use public legislation to achieve private gain. Nonetheless, neither P. A. 490 nor the 1972 Conveyance tax are really land use control devices. According to Robert Schoeplein, There is no contract between the property holder and the town, or any governmental jurisdiction, that would preclude development of the open space land at a time of the owner's choosing. If the land has enjoyed preferential property tax treatment for five years, for example, the speculator now must include five-year, 5 percent conveyance tax as another deductible transaction cost in calculating net returns from development. But the rate of annual appreciation, the value of land as an element in the total development project, capital gains taxation, and other considerations can swamp the conveyance penalty in the decision to develop.



## Development Rights

In order to protect Connecticut's existing agricultural land, the Governor's Task Force for the Preservation of Agricultural Land has recently proposed that the state authorize the issuance of bonds for up to 500 million dollars to purchase the development rights of those owning farmland. According to the Task Force, the pressure to develop rural Connecticut has encouraged many farmers to sell out to land speculators offering high prices for farmland. In contrast to Public Act 490, the transfer of development rights would be a permanent means of controlling the quantity of agricultural land in the state. A farmer wishing to participate in this program would sell his right to develop the land to the state with the provision that his land would be maintained as a permanent agricultural preserve. In effect, the farmer would receive the difference between the value of the land for growing food and its value for development.

Despite the advantages of development rights as a means to control land uses within the state, not everyone has supported the Task Force proposal. The John C. Lincoln Institute has persuasively argued that in an era of regional specialization within the Nation, agriculture in Connecticut may be a less profitable use of the land than its use for manufacturing and shopping centers. The Lincoln Institute emphasized

"Connecticut is not an island unto itself. Most of its required food is being more efficiently and profitably produced elsewhere."<sup>23</sup>

The Lincoln Institute has taken exception with the Governor's Task Force

recommendations indicating that agriculture is not as important to the state as the Task Force suggested and that efforts to maintain agriculture within the state may lead to uneconomical uses of the state's land.<sup>24</sup> However, the Task Force recommendations are not to be dismissed as easily as that. The fact that much of the state's food will continue to be grown elsewhere does not mean that agriculture is without a place within the state. Some agricultural activities, such as dairy farming, must be maintained near the urbanized areas of New England in order to assure fresh and low cost dairy products.<sup>25</sup>

According to Irving Fellows, Professor of Agricultural Economics at the University of Connecticut, eggs could be imported from as far away as California, milk could be transported from as far away as Wisconsin without loss of quality. However, shipment of eggs or milk over these distances tends to make the cost of these products prohibitively high. Besides assuring low cost farm products, agriculture must be maintained in Connecticut to avoid the possibility that at some future date out-of-state produce will no longer be readily available for the New England market. It is predicted that by the year 2000 both eggs and vegetables produced in California will only be sold in the local Western market due to the growth of the Western population of the United States. Similarly, since milk from Wisconsin will probably be sold in the Southern states, Connecticut must maintain its milk production at least at existing levels to assure an adequate supply in the future. (See Figure I)

One drawback of development rights as it is presently proposed is that there is no assurance that those who would sell their development rights to the state would actually be engaged in productive farm activities. Farmers could very well sell their development rights to the state and bank all of their

<sup>24</sup> Birkelbach, Aubrey and Wassall, Gregory, The Case Against the Sale of Development Rights of Connecticut's Agricultural Land, undated report P.8.

<sup>25</sup> Interview with Irving Fellows, Department of Agricultural Economics, University of Connecticut, February 25, 1976



earnings off the transfer in a savings account rather than reinvesting it in agricultural production or equipment.<sup>26</sup> This is not to say that the purchase of development rights is a worthless endeavor. Rather, it indicates that any legislative ventures designed to protect farmland and promote the agricultural productivity of state farms must consider the costs and benefits such a program could create.

In 1975, efforts to implement the Task Force recommendations were stalled in the finance committee of the state legislature; but, according to the Task Force secretary, Donald Tuttle, the bill will be resubmitted in 1976. In the meantime, the state legislature passed Public Act Number 75-463 allowing the Board of Agriculture to

"obtain an inventory of all land in the state which, without substantial removal of structures on such land, meet the definition of agricultural land...and (2) formulate criteria for the designation of lands for which development rights...may in the future be acquired by the state, including consideration of cost of acquisition."<sup>27</sup>

The Board will inventory agricultural land assessing its suitability "with reference to soil types and existing and past use of such land for agricultural purposes..."<sup>28</sup> At present, special emphasis is being placed on the soils survey of agricultural land to determine the location and quantity of the most fertile soils.

26

Birkelbach, Aubrey and Wassall, Gregory, The Case Against the Sale of Development Rights of Connecticut's Agriculture Land, Undated report

27

Public Act 75-463, P.2.

28

Ibid, P.1.

However, an assessment of the importance of agriculture to the state must not be limited to a discussion of soil types since many types of agricultural activities are minimally dependent on the quality of local soils. As an example, poultry farms import most of their feed from out-of-state sources and dairy farmers have increasingly turned to the use of high protein feeds grown in the midwest to increase milk production. In addition, Regional Poultry Agent, James Rock of The Cooperative Extension Service has suggested that poorer land on the edges of productive land should be preserved for animal units that need land to dispose of manure. As a result, land and soil suitability, in and of itself, is a limited gauge of the importance of many forms of agriculture within the Region and the state.

A state program to conserve agricultural land and maintain and or improve agricultural productivity must also consider such issues as (1) the effect of increasing food imports from out of state on the cost of food, (2) the effect of warehousing of foods in out-of-state locations on the freshness of farm produce, consumed by state residents, (3) the effect that the purchase of development rights would have on the productivity, efficiency and profitability of operating a farm in Connecticut and (4) the future levels of food production needed to feed residents of the state, nation and the world. Since agricultural production is a world issue, state and regional efforts aimed at preserving agricultural land must consider trends in world food production when determining the relative importance of planning agriculture on the local level.

Another possible method of preserving agricultural land would be by modifying subdivision regulations and zoning ordinances to encourage residential development on hillsides and the clustering<sup>of</sup>/development which could minimize the pressure on farmers to sell productive farmland.

Clustering of development is encouraged in the areas designated as limited residential development in the Regional Plan of Development. Though these areas could have the same overall density as non-clustered development they could provide an equal amount of land to be set aside for open space. The open space could be preserved as agricultural land by developers and rented to local farmers.



However, if local regulations and zoning ordinances or a state program to purchase the development rights of farmers fails to preserve farmland and maintain agricultural productivity, local governments in the Central Naugatuck Valley Region could encourage crop production through promoting the old concept of the "Commons" found in 18th Century England. One Connecticut town, Mansfield, has already developed a "Commons" by offering local residents small plots of land for the cultivation of vegetables. This program will certainly not replace the need to preserve large scale truck farming and dairy farming but could provide many town residents with an opportunity to grow their own fresh produce at minimal out-of-the-pocket costs.

Importance of many forms of agriculture within the region and the state.

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## Conclusion

The prospects for future farming in the Region and the state are clear; unless legislative action is taken and municipal assessment and zoning policies are reevaluated, our farmers will not only go out of business but are apt to sell off their farmland to the highest bidder. However, excessive protection of farming is not the answer. If farmers are allowed to operate without the constraints of the free enterprise system, incentives for productivity and profit might be cast aside for the economic gains of a state and local subsidy for farm maintenance and farmland preservation. What is needed is a state policy designed to preserve (1) essential farms and (2) productive farmlands with assurances that agricultural productivity will be maintained at existing levels and, if possible, improved.

While a subsidy of state farmers in the form of the purchase of their development rights has its advantages, such a policy cannot possibly attempt to make the state agriculturally self sufficient. Nor should it. Though some proponents of Connecticut farming have felt that the motivation for the preservation of agriculture in the state has been to prepare for, and offset any, future food shortages in the nation or the world that might limit Connecticut's food supply - this form of planning is more properly the domain of national and global agricultural policies.

The state (and to an even lesser extent the Region) can only play a small part in increasing future food supplies and decreasing the demand for food. This will only occur through (1) limiting population growth, (2) discouraging the use of state land for meat production, (3) preserving farms producing goods that lose freshness and increase in price through long distance transport, and (4) maintaining existing levels of agricultural self sufficiency in the state.

Despite the fact that farmers are not a very large segment of the state's or the Region's labor force, they are responsible for providing a large portion of our total food needs. However, the value of farming is not merely limited to the value



of the food produced regionally or statewide. Many residents of the CNVR and the state are as much concerned with maintaining farmland for its agricultural purposes as they are for its aesthetic and tourist value. The small quaint New England town with its village green, pastures, colonial homes, and colonial style barns has added a charm to the Connecticut countryside which many would like to retain. In a sense, for some people, the preservation of agricultural land in the state and in the farm towns of the CNVR has taken on the broader mission of preserving the charm of Connecticut's small town life.

In effect, the colonial beginnings of many farms in the Region has tended to equate farm liquidation with the liquidation of the tradition and history of the rural-suburban town. Though this may be an important local reason for protecting farmland, it must not form the basis of a state policy designed to preserve the agricultural self sufficiency of the Region's and State's farming. It is not charm and the property values of local municipalities that are at issue, but the ability of the Region's and State's farmers to produce some portion of our annual food needs.

## Objectives and Policies

Objective I: To encourage the preservation of all agriculture activities and agricultural lands to assure Connecticut residents of low cost food supplies despite population growth and possible declines in the availability of out-of-state products.

Policy I.1: To encourage the preservation of dairy and truck farming which are dependent upon the presence of nearby markets and whose products may deteriorate through long distance shipment.

Criteria I.1.1: Monitor the number of dairy farms and the daily milk production in the CNVR.

Criteria I.1.2: Monitor the Region's self sufficiency in the production of milk, eggs, vegetables and fruits.

Policy I.1.2: To encourage the state to prepare a thorough cost benefit analysis of the desirability of preserving crop and forest land through the purchase of the development rights of farmers.

Objective II: Urge the state and municipal governments to provide financial, technical, manpower and legal assistance to farmers of the Central Naugatuck Valley Region.

Policy II.1: To encourage the state to provide low interest state backed loans to qualified young farmers wishing to enter a career in agriculture.

Policy II.2: To assure that farmers in the CNVR are provided with the latest research and the technical assistance of the County Extension Service in order to obtain the highest level of production possible.

Policy II.3: To encourage the State Tax Department to set more precise municipal standards for valuation reductions for those receiving farmland exemptions under Public Act 490.



Criteria II.3.1: The valuation reductions for land classified as farmland under Public Act 490 in the CNVR.

Policy II.4: To encourage the State Labor Department to assist farmers in the recruitment of youth, older workers and the hard core unemployed during the harvest season.

Policy II.5: To encourage towns to modify their subdivision regulations and zoning ordinances to promote development on non-agricultural lands (when septic systems are feasible or sewer services are present) and the clustering of development in order to limit the decline of productive farmland.

TABLE I

Farm Acres Exempted Under Public Act 490 in the  
Central Naugatuck Valley Region: Fiscal Year 1975

Municipality	Farm Acres	Total Acres	Percent of Municipal Land In Farmland
Beacon Falls	0.	6,315	0
Bethlehem	2,893.0	12,567	23.0
Cheshire	2,715.0	21,188	12.8
Middlebury	863.13	11,766	8.8
Naugatuck	426.82	10,525	4.1
Oxford	2,016.0	21,362	9.4
Prospect	81.6	9,248	0.9
Southbury	5,087.0	25,575	19.9
Thomaston	65.1	7,757	0.93
Waterbury	25.	18,555	0.16
Watertown	4,103.0	18,896	21.7
Wolcott	112.7	13,528	0.83
Woodbury	3,059.3	23,420	13.0
CNVR	21,620.00	200,702	10.8

Source: Assessor's Office in each municipality, January, 1976.



TABLE II

Farms in the CNVR by Type: 1975

Municipality	Dairy <sup>1</sup>	Orchards <sup>2</sup>	Poultry <sup>3</sup>	*Nursery <sup>4</sup>	Pig <sup>5</sup>	Wholesale Or Retail Vegetable <sup>6</sup>	Christmas Tree Growers <sup>7</sup>
Beacon Falls	1	0	0	0	1	1	1
Bethlehem	15	1	2	2	0	0	8
Cheshire	2	3	6	10	0	18 <sup>a</sup>	17
Middlebury	1	0	1	2	0	2	5
Naugatuck	1	0	2	2	0	1	7
Oxford	6	0	1	4	0	1	1
Prospect	1	0	2	2	0	0	1
Southbury	4	0	3	2	2	2	0
Thomaston	1	0	2	0	1	0	8
Waterbury	0	0	0	2	1 <sup>b</sup>	2	6
Watertown	12	1	3	2	0	2	11
Wolcott	0	0	1	1	0	0	1
Woodbury	8	0	1	6	1	1	12
CNVR	52	5	24	35	6	30	78

<sup>1</sup>State of Connecticut, Department of Agriculture, Dairy Division, January, 1976.<sup>2</sup>George Sweeney, King's Mark RC&D Project, January, 1976.<sup>3</sup>Jim Rock, Connecticut Cooperative Extension Service, January, 1976.<sup>4</sup>Schramm, Robert, Jr., Extension Nursery Specialist, Cooperative Extension Service, University of Connecticut, January, 1976.<sup>5</sup>Mr. Peterson, Livestock Division, State of Connecticut, Department of Agriculture, November, 1974.<sup>6</sup>Judd, Roy, Extension Horticulturalist for the University of Connecticut, January 9, 1976.<sup>7</sup>Schramm, Robert, Jr., Extension Nursery Specialist, Cooperative Extension Service, University of Connecticut, January, 1976.<sup>a</sup>Includes 3 wholesale vegetable farms.<sup>b</sup>Garbage feeding pigs. All others are grain feeders.

\*Nursery farms are defined as any farming operation which produces ornamental plants other than flowering plants in containers or in fields or greenhouses. It may include Christmas tree growers but not the floral or bedding house industry.

TABLE III

Agricultural Sales for Major Farm Products  
in the CNVR: 1974

Products	Estimated Sales	Percent
Milk <sup>1</sup>	\$3,661,886	41.3
Eggs <sup>2</sup>	2,275,150	25.7
Apples <sup>3</sup>	132,102	1.5
Pears <sup>3</sup>	7,780	.1
Peaches <sup>3</sup>	7,904	.1
Nurseries <sup>4</sup>	2,402,000	27.1
Vegetables <sup>5</sup>	368,132	4.2
Total	\$8,854,954	100.

<sup>1</sup>Based on USDA Agricultural Marketing Service Federal Milk Order Market Statistics Annual Summary for 1974 and State of Connecticut Department of Agriculture, Dairy Division, January, 1976.

<sup>2</sup>Based on USDA Statistical Reporting Service Agricultural Prices Annual Summary, 1974, and Jim Rock, Connecticut Cooperative Extension Service, January, 1976.

<sup>3</sup>Based on USDA Economic Research Service, Fruit Situation, March, 1975, P. 29.

<sup>4</sup>Based on U. S. Bureau of the Census, Census of Agriculture, 1969, Volume 1, Area Reporting, Part 6, Connecticut, P. 45, Nursery farm sales in New Haven County were \$42,469 per farm in 1969. Based on the wholesale price index for farm products the average sales per farm were projected to be \$68,625 per farm in 1974. (35 nurseries x \$68,625 = \$2,401,897)

<sup>5</sup>Based on U. S. Bureau of the Census, Census of Agriculture, 1969, Volume 1, Area Reporting, Part 6, Connecticut, P. 45, vegetable farm sales in New Haven County were \$8,957 per farm in 1969. Based on the Wholesale Price Index for commercial vegetables (cited in Agricultural Prices Annual Summary 1974) the average vegetable farm experienced a 37% increase in prices received for their produce between 1969 and 1974 resulting in an average of \$12,271 in sales per farm in 1974. (30 x \$12,271 = \$368,132)



TABLE IV

Average Farm Sales by Farm product for Farms with Sales  
of \$2500 and Over in New Haven County and the State: 1969

Product	New Haven County*	Connecticut
Crops Including Nursery Products and Hay Sold	\$28,372	\$ 40,011
Grains	2,752	1,190
Tobacco	0	222,917
Cotton and Cottonseed	0	0
Field Seeds, Hay, Forage and Silage	3,703	4,484
Other Field Crops	599	18,417
Vegetables, Sweet Corn and Melons	8,957	8,040
Nursery and Green House Products	42,469	56,371
Fruits, Nuts and Berries	24,010	16,384
Forest Products Sold	945	1,103
Livestock, Poultry and Their Products Sold	30,127	40,192
Poultry and Poultry Products	30,383	56,308
Dairy Products	32,958	34,400
Dairy Cattle and Calves	2,918	3,382
Hogs, Sheep and Goats	4,580	5,208
Other Livestock and Livestock Products	10,792	6,690
Farms with Farm Related Income from		
Custom Work and Other		
Agricultural Services	2,135	3,191
Recreational Services	4,901	5,058
Government Farm Programs	316	460

\*The municipalities of the Central Naugatuck Valley Region that fall within New Haven County are: Beacon Falls, Cheshire, Middlebury, Naugatuck, Oxford, Prospect, Southbury and Waterbury.

Source: U. S. Bureau of the Census, Census of Agriculture, 1969, Volume 1, Area Reports Part 6, Connecticut, U. S. Government Printing Office, Washington, DC, 1972, pp. 4 and 45.

TABLE V

Average Yields in Connecticut Compared with Ohio and Iowa: 1940-1970

Estimated Per Capita Consumption of Selected Food  
Items Supplied within the CNVR: 1974

Milk Per Cow - Pounds

Food Item	1974 U.S. Per Capita Consumption	1974 Per Capita Consumption Produced in the CNVR	Percent of 1974 Average U.S. Per Capita Consumption Supplied Locally*
	(lb.)	(lb.)	Eggs Per Hen
Fluid Milk	284.	161.	56.6
Eggs (Numbers)	287.	134.	46.7
Apples	15.8	6.6	41.8
Peaches	4.2	.34	8.1
Pears	2.5	.36	14.7

\*Though some food produced within the Region is sold elsewhere, the Region is capable of supplying the above mentioned proportion of its food needs if all food that was produced within the Region was sold within the Region.

Production Changes in Connecticut Agriculture: 1940-1970

Source: USDA Fruit Situation, July, 1975, P. 45.

USDA National Food Situation, Economic Research Service, November, 1975, P. 21.

State of Connecticut, Department of Agriculture, January, 1976.

George Sweeney, King's Mark RC&amp;D Project, January, 1976.

8	8	11	703	621	269	(Million lbs.)
73	8	73	675	623	36	Eggs (Millions)
73	73	77	6,952	52,184	2,030	Broilers (Thousands)
58	9	6	1,878	2,623	2,034	Potatoes (Thousands Bu.)
38	32	19	2,500	8,800	16,200	Tobacco (Acres)
14	13	32	11,482	13,340	22,202	Vegetables and Beans (Acres)
14	13	16	1,000	1,000	1,210	Apples (Thousands Bu.)

Sources: Johnson S. and Fellows, I. F., Connecticut Agriculture-Trends and Statistics, 1970, Extension Service, College of Agriculture and Natural Resources, University of Connecticut, Storrs. (September, 1971)



TABLE VI

Average Yields in Connecticut Compared with Ohio and Iowa: 1940-1970

Production Item	Connecticut	Ohio	Iowa
Milk Per Cow - Pounds			
1940	5,780	4,640	4,780
1950	6,450	5,580	5,490
1960	8,340	7,460	6,980
1965	9,770	9,370	8,280
1970	10,359	9,705	9,489
Eggs Per Hen			
1940	175	144	123
1950	202	183	185
1960	219	213	220
1965	217	219	226
1970	223	224	225

Source: Johnson, S. and Fellows, I. F., Connecticut Agriculture-Trends and Status, 1970, Extension Service, College of Agriculture and Natural Resources, University of Connecticut, Storrs. (September, 1971)

TABLE VII

Production Changes in Connecticut Agriculture: 1940-1970

Item	1940	1950	1960	1970	Percent Change		
					40-50	50-60	60-70
Milk, Sales from Commercial Farms (Million Lbs.)	569	651	703	647	+14	+8	-8
Eggs (Millions)	361	623	675	927	+73	+8	+37
Broilers (Thousands)	5,050	13,982	22,184	6,055	+177	+59	-73
Potatoes (Thousand Bu.)	3,034	2,867	2,623	1,878	-6	-9	-28
Tobacco (Acres)	16,300	19,400	8,800	5,500	+19	-55	-38
Vegetables and Small Fruits (Acres)	25,205	16,380	13,340	11,485	-35	-19	-14
Apples (Thousand Bu.)	1,210	1,406	1,050	1,200	+16	-25	+14

Source: Johnson S. and Fellows, I. F., Connecticut Agriculture-Trends and Status, 1970, Extension Service, College of Agriculture and Natural Resources, University of Connecticut, Storrs. (September, 1971)

TABLE VIII

Average Daily Milk Production Per Cow in the  
State and the CNVR: 1935-1975

Year	State (lbs.)	CNVR (lbs.)
1935	20.5	N.A.
1940	22.5	N.A.
1950	27.1	N.A.
1963	27.9	28.4
1970	40.6	31.9
1975	41.4	38.5

Source: Dairy Division, State of Connecticut Department of Agriculture, January, 1976.

TABLE IX

Average Number of Cows Kept for Milking Per Farm  
in the State and the CNVR: 1935-1975

Year	State	CNVR
1935	10.	N.A.
1940	12.9	N.A.
1950	17.1	N.A.
1963	36.2	42.8
1970	42.8	53.8
1975	53.6	53.8

Source: Dairy Division, State of Connecticut Department of Agriculture, January, 1976.



TABLE X

Production of Milk and Value of Milk in the CNVR: 1962 and 1974

Municipality	1962			1974		
	Daily Lbs. of Milk	Estimated Amount Milk Produced	Estimated Value of Milk Sold*	Daily Lbs. of Milk	Estimated Amount Milk Produced	Estimated Value of Milk Sold*
Beacon Falls	3,055	1,115,440	\$ 66,591	1,918	700,700	\$ 65,870
Bethlehem	31,378	11,452,970	683,742	26,516	9,678,340	910,728
Cheshire	7,034	2,567,410	153,274	4,806	1,754,190	165,060
Middlebury	7,604	2,775,460	165,694	4,540	1,657,100	155,933
Naugatuck	2,436	889,140	53,081	2,392	873,080	82,149
Oxford	13,466	4,915,090	293,430	8,343	3,045,195	286,543
Prospect	1,901	693,865	4,142,374	800	292,000	27,477
Southbury	19,633	7,166,045	427,812	12,500	4,562,500	429,331
Thomaston	1,521	555,165	33,143	508	185,420	17,446
Waterbury	619	225,935	13,488	0	0	0
Watertown	33,520	12,234,800	730,417	28,818	10,518,570	989,790
Wolcott	360	131,400	7,844	0	0	0
Woodbury	19,004	6,936,460	414,106	15,475	5,684,375	531,505
CNVR	141,532	51,659,180	3,084,053	106,616	38,914,840	3,661,886

\*Annual Connecticut milk price in 1962 was \$5.97/100 lbs. Annual Connecticut milk price in 1974 was \$9.41/100 lbs.

Source: USDA Agricultural Marketing Service, Federal Milk Order Market Statistics Annual Summary for 1962 and Annual Summary for 1974.

TABLE XI

Dairy Farms in the CNVR: 1972-1974

Municipality	Farms			Cows Kept for Milking During April			Pounds of Milk Produced on Day of Inspection		
	1962	1970	1974	1962	1970	1974	1962	1970	1974
Beacon Falls	3	2	1	126	87	46	3,056	3,084	1,918
Bethlehem	30	20	16	1,151	1,079	825	31,378	31,366	26,516
Cheshire	7	3	2	256	153	137	7,034	5,045	4,806
Middlebury	5	1	1	255	87	170	7,604	2,955	4,540
Naugatuck	3	2	1	109	105	67	2,436	3,550	2,392
Oxford	18	9	7	503	365	227	13,466	12,115	8,343
Prospect	5	1	1	109	19	20	1,901	650	800
Southbury	21	8	4	757	567	373	19,633	20,830	12,500
Thomaston	4	2	1	72	48	19	1,521	1,250	508
Waterbury	1	1	0	33	33	0	619	873	0
Watertown	34	18	14	1,353	1,032	862	33,520	33,654	28,818
Wolcott	3	0	0	39	0	0	360	0	0
Woodbury	21	11	8	767	621	566	19,004	18,634	15,475
CNVR	155	78	56	5,540	4,196	3,312	141,532	134,006	106,616
Remainder of Region	Between 1962 and 1974, there was a 63.6% drop in the number of farms.			Between 1962 and 1974, there was a 40.2% drop in the number of cows.			Between 1962 and 1974, there was a 23.6% drop in pounds of milk produced.		

Source: State of Connecticut, Department of Agriculture, 1975.



TABLE XII

## Active Agricultural Land in CNVR, by Municipality: 1970

Municipality	Agricultural Acres	Total Acres	Percent of Municipal land in Agriculture
Beacon Falls	320	6,315	5.1
Bethlehem	4,742	12,567	37.7
Cheshire	3,209	21,188	15.2
Middlebury	1,033	11,766	8.8
Naugatuck	436	10,525	4.1
Oxford	2,333	21,362	10.9
Prospect	231	9,248	2.5
Southbury	4,076	25,575	15.9
Thomaston	229	7,757	3.0
Waterbury	50	18,555	0.27
Watertown	4,426	18,896	23.4
Wolcott	308	13,528	2.3
Woodbury	4,921	23,420	21.0
CNVR	26,314	200,702	13.1

Source: 1970 Connecticut Land Use Update Study

TABLE XIII

Formulas for Determining the Value of Agricultural Land in the CNVR: 1976

	Tillable	Pasture	Woodland and Brush	Swamp and Ledge	Orchard
Beacon Falls	No Formula. (Since all farmland is valued under \$100, P.A. 490 offers no tax advantages in Beacon Falls.)				
Bethlehem	150	50	25	-	-
Cheshire	←—————		300 Per Acre	—————→	
Middlebury	←—————		200 Per Acre	—————→	
Naugatuck	←—————		100 Per Acre	—————→	
Oxford	250	125	50	50	250
Prospect	←—————		100 Per Acre	—————→	
Southbury	130	70	50	50	-
Thomaston	125	50	25	10	-
Waterbury	←—————		435 Per Acre*	—————→	
Watertown	130	100	25		400
Wolcott	←—————		Left Up To Judgment of Assessor		—————→
Woodbury	160	80	55	30	-

Source: Assessor's office in each Municipality, 1976.

\*Since Waterbury has only one farm, it appears that a base rate/acre exists for all farmland. However, in fact, the decision is left up to judgment of the assessor due to the limited quantity of agricultural land in Waterbury.



TABLE XIV

Assessed Value of Farmland Exemptions in the CNVR Under Public Act 490: Fiscal Year 1975

	Number of Landowners Receiving Farm Exemptions	Farm Acres Exempted in 1975	Average Farm Size	Preclassification Assessment of Acreage Under Farmland Designation	Assessed Value of Acreage Under Farmland Designation	% Reduction in Farm Assessment	Average Value Per Acre After Classification
Beacon Falls	0	0	0	0	0	0	0
Bethlehem	46	2,893	62.9	\$ 125,568	\$ 111,299	11.3	\$ 38.47
Cheshire	101	2,715	26.8	1,954,800	488,700	75	180.0
Middlebury	27	863.13	32.0	739,003	124,784	80.3	144.5
Naugatuck	4	426.82	106.7	89,635	21,215	76.3	49.70
Oxford	35	2,016	57.6	933,140	234,385	74.8	116.26
Prospect	4	81.6	20.4	40,800	8,160	80	100.
Southbury	79	5,087	64.3	1,760,700	276,760	84.3	54.40
Thomaston	2	65.1	32.5	14,433	2,122	85.2	32.59
Waterbury	1	25	25	27,500	10,900	60.4	435.00
Watertown	28	4,103	146.5	1,724,600	508,850	70.5	124.01
Wolcott	5	112.7	22.5	33,370	21,100	36.7	187.22
Woodbury	41	3,059.3	74.6	2,061,905	184,070	91.0	60.16
CNVR	373	21,620	57.97	9,505,454	1,993,488	79.0	92.20

Source: Assessor's office in each Municipality, 1976.

Figure I

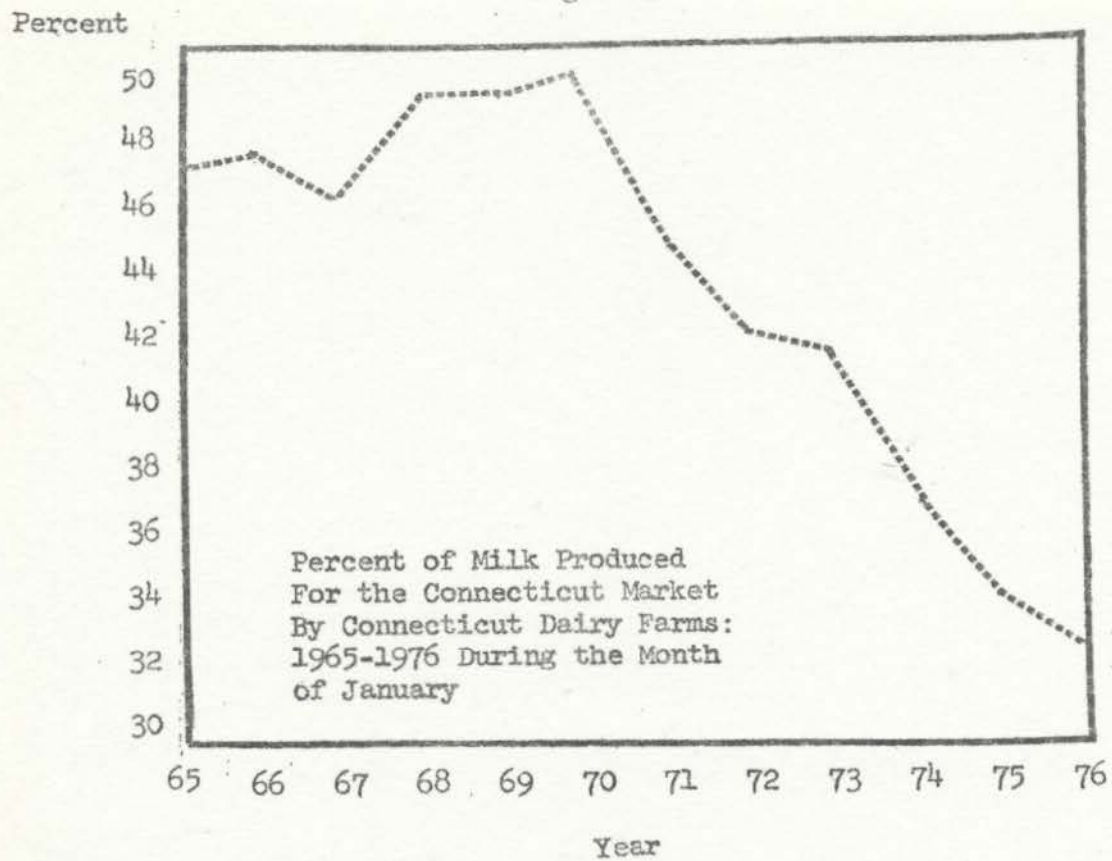


Figure II

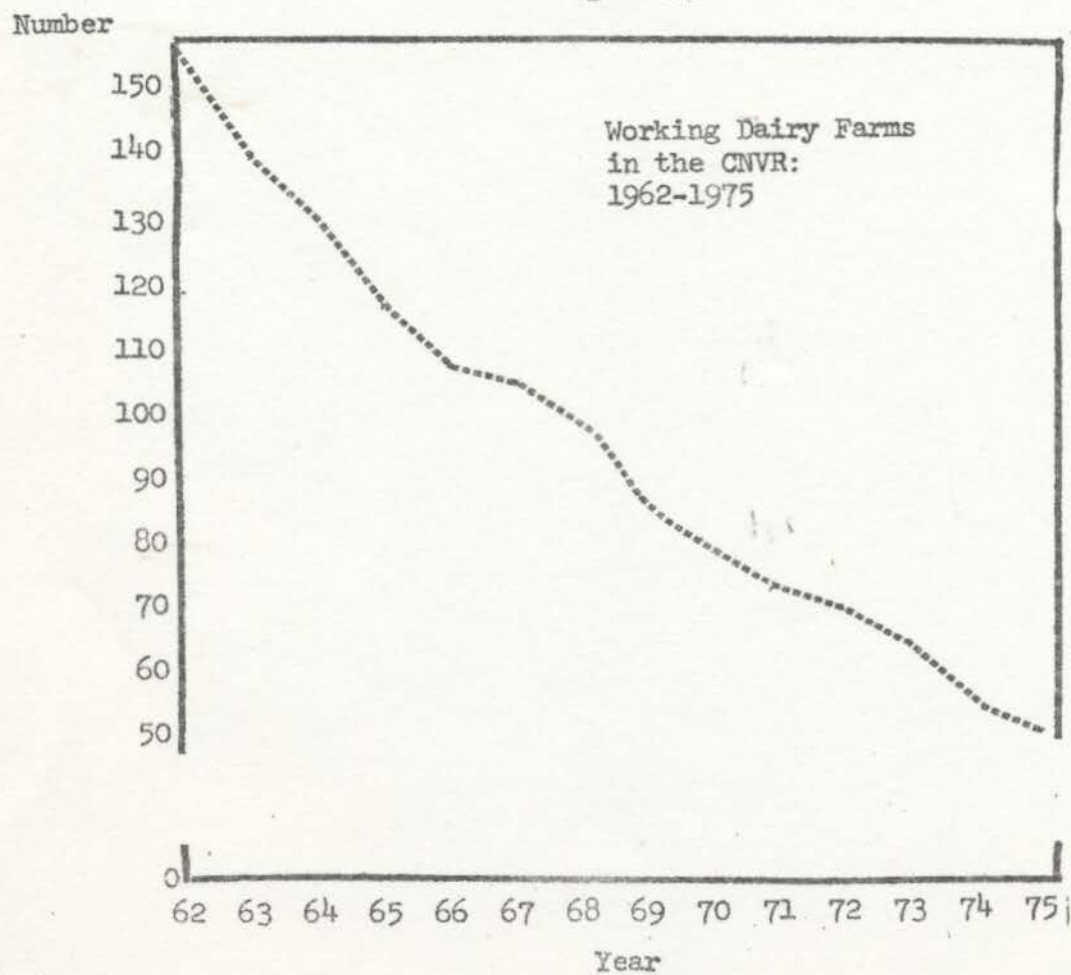
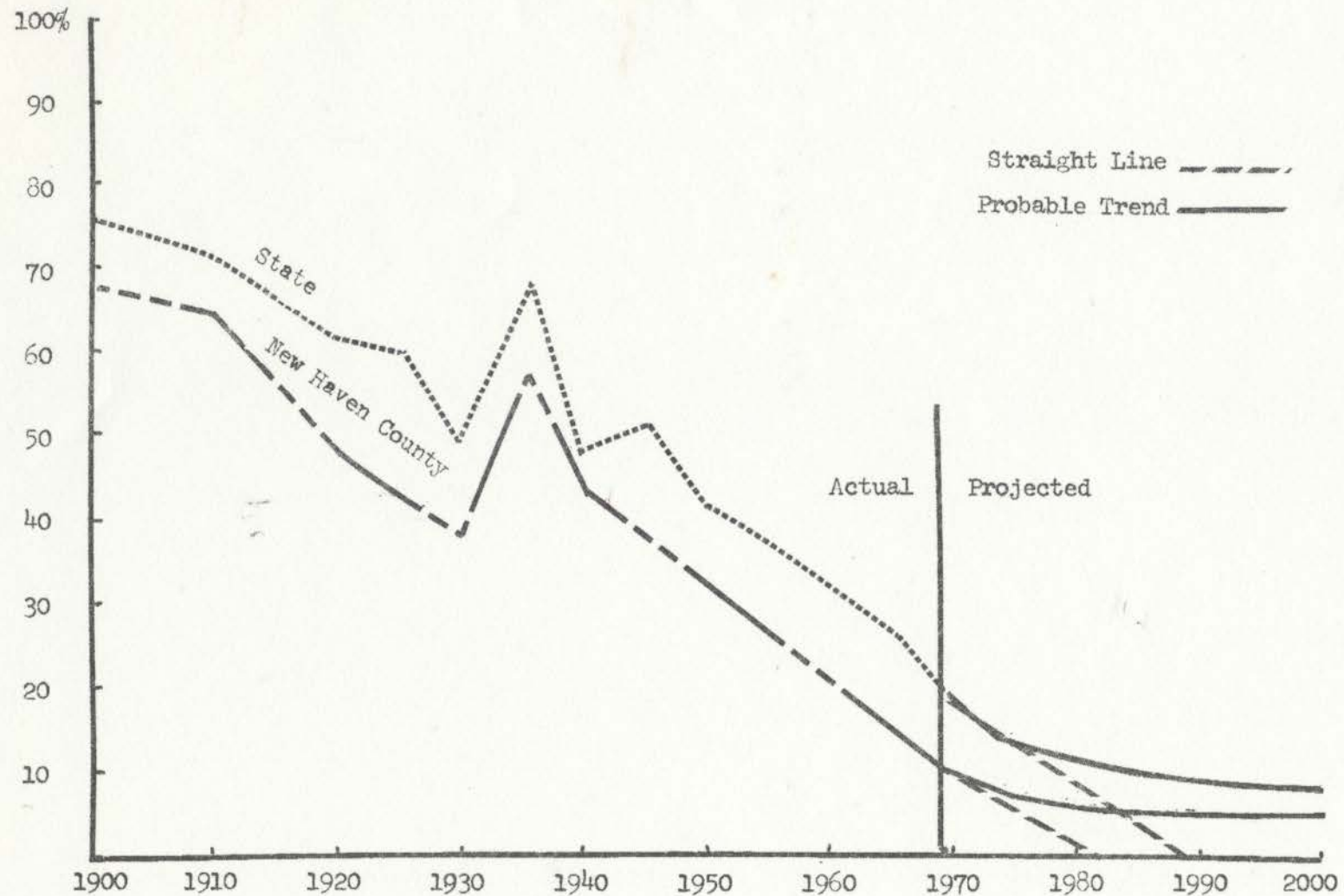




Figure III

Percentage of All Land in Farms in New Haven County and the State: 1900-2000



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